

Parent/Guardian Survey Tool to Assess Understanding of Vaccination

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Parent/Guardian Survey Tool to Assess Understanding of Vaccination

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BACKGROUND

There has been increased skepticism of vaccination in the population in recent years. Factors such as fear, misinformation, and personal beliefs impact parents' decision to forego vaccination or follow a schedule that is different than the one suggested by the American Academy of Pediatrics (AAP) and Center for Disease Control (CDC).

There has been a slow, but steady rise in the number of parents that make vaccination decisions based on misinformation and/or beliefs, even though only a minority of the population has chosen to deviate from AAP and/or CDC recommendations. This has resulted in a resurgence of concerns about the return of serious preventable diseases in a time when health care providers and policy makers are emphasizing preventative medicine due to outbreaks of vaccine-preventable diseases.

OBJECTIVE

We developed a survey tool to assess the knowledge and beliefs of the parent and/or guardians of pediatric patients of All Children's General Pediatrics Clinic. This has the potential to better educate parents/guardians about the benefits and safety of childhood vaccinations.

Physicians can start to address specific knowledge gaps and be better equipped to have meaningful conversations with patients regarding their decisions to vaccinate their children. However, it is important that physicians understand parents/guardians vaccine hesitancy.

METHODS

1. Reception staff in General Pediatrics distributed the survey tool to parents/guardians of pediatric patients needing medical services in an out-patient clinic setting. Responders received the survey tool at check-in and completed it in the waiting area before their appointment with their health care provider. Investigators were blind to the patients. Demographic information (e.g., age, gender, relationship to patient, race/ethnicity, etc.) were not collected. Responders were not given incentives to participate and were not obligated to complete the survey and could stop at any time.
2. For part 1, parents and/or guardians answered 10 statements with "1 = Disagree", "2 = I don't know", or "3 = Agreed".
3. For part 2, parents and/or guardians answered 5 questions using a checklist. The checklists were used to elicit responses to otherwise open-ended questions. Responders had opportunities to fill in a different response as necessary. Responders could select more than one answer.
4. Students quantified and analyzed results to determine strengths, weaknesses, and areas to improve tool.
5. Physician mentor shared results with the pediatric clinic.

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- Pediatric Infectious Disease Staff at All Children's Hospital for communicating with General Pediatrics.
- General Pediatrics Staff at All Children's Hospital for conducting the survey.

SURVEY TOOL DESIGN

Our survey tool was designed to work in conjunction with the physician education-communication tool developed by April Pearson and Derek Djavaherian in 2013 (SELECT MD Class of 2016). This tool provides evidence-based statements that physicians can communicate to their patients about vaccination. In order to implement this tool, it is important for physicians to understand what parents/guardians understand about vaccinations. Our survey tool assesses responders' knowledge, safety, trust, financial awareness, and values with respect to vaccinations.

Part 1: Agree Statements	Attempted Assessment
1. I feel that I have enough knowledge to make my own decisions about vaccinating myself and family.	How knowledge impacts decisions about vaccinating themselves and/or family.
2. Diseases that can be prevented with a vaccine are not life-threatening.	Knowledge about the purpose and benefits of vaccinations.
3. I never get sick, so I don't need vaccinations.	Knowledge about the purpose of vaccinations.
4. It is possible to get sick from the vaccine with the disease it is trying to prevent.	Knowledge about safety of and how vaccines work.
5. Vaccines are not safe and have not been evaluated for safety.	Knowledge about the safety of vaccines.
6. Vaccines can cause disabilities.	Knowledge about the impact of vaccines on child's growth and development.
7. My health insurance covers all vaccines.	Knowledge about insurance coverage for preventative care.
8. I trust my physician and/or other health care providers to explain the benefits and safety of vaccines.	Trust in the doctor-patient relationship.
9. My physician is advocating for my best interests in promoting vaccinations and preventative care by following the standard of care and recommendations of the American Academy of Pediatrics.	Trust in the doctor-patient relationship.
10. My religious and/or philosophical beliefs guide my health care decisions.	Role of religious and/or philosophical beliefs in making health care decisions.

Part 2: Checklist Questions	Attempted Assessment
1. Where did you hear or learn about vaccines? • Your child's school and/or day care • Family and/or friends • Internet • Physician/Nurse/Health Care Provider • Other	Source of information about vaccines.
2. What is something you wish you knew more about with regards to vaccines? • Benefits and/or risks • Safety • Impact on your child's growth and development • Cost and/or insurance coverage • Other	How physicians can help their patients build understanding of vaccines
3. What do you wish your physicians understood about your reasons to vaccinate or not vaccinate yourself and/or your child? • My understanding about vaccines and its benefits/risks. • Belief system • Cost and/or insurance coverage • Other	How physicians can help their patients build understanding of vaccines with respect to their concerns and/or values.
4. What is your biggest concern about vaccines (if any)? • Safety • Trust of the public health experts and/or scientific research • No concerns • Other	Concerns physicians can address with parents/guardians
5. Are you and your immediate family up to date with vaccinations? • Yes. • No. • I don't know.	Standard question when obtaining a complete medical history of the patient.

RESULTS

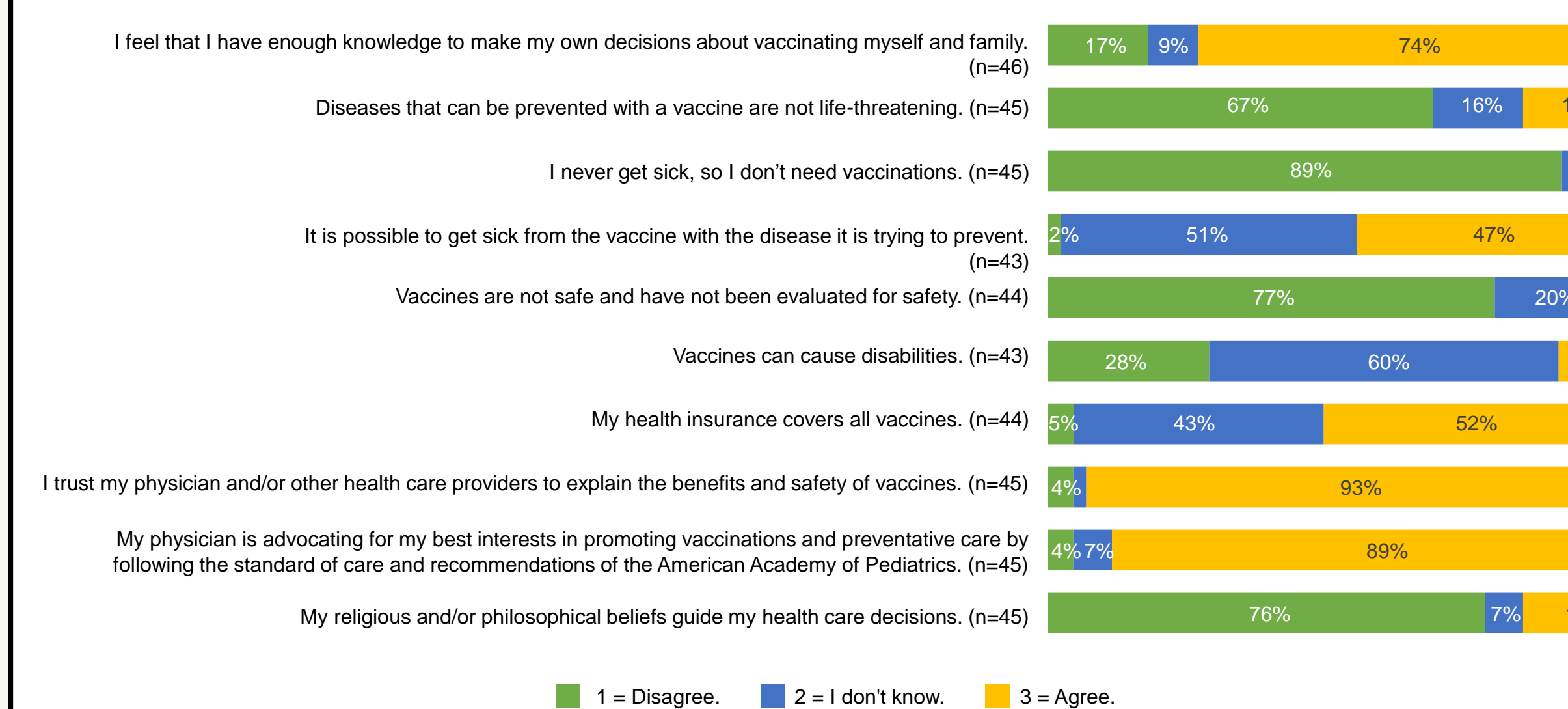
Participation and completion

- 46 participants between 4/2/2014 – 4/11/2014
- 6 incomplete surveys for part 1
- 6 incomplete surveys for part 2
- unknown number of people, who refused to participate

Are you and your immediate family up-to-date with vaccinations?

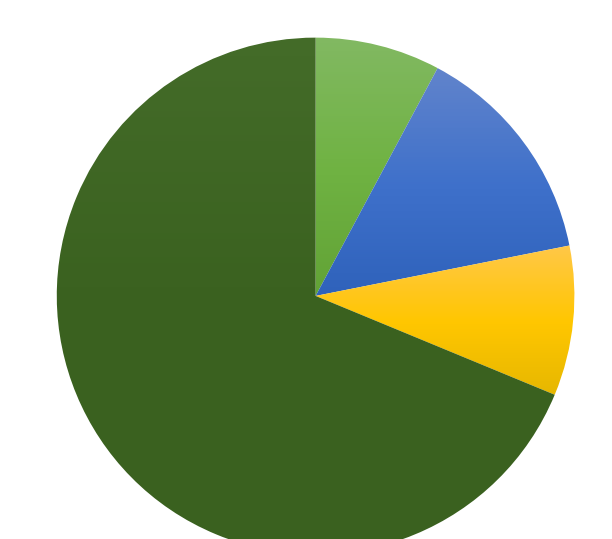


PART 1

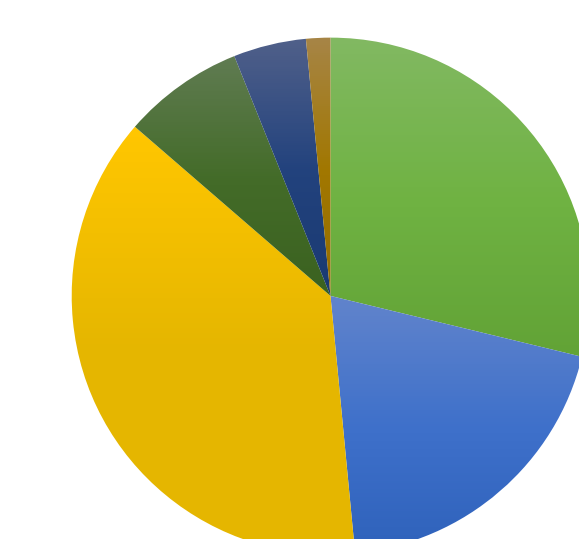


PART 2

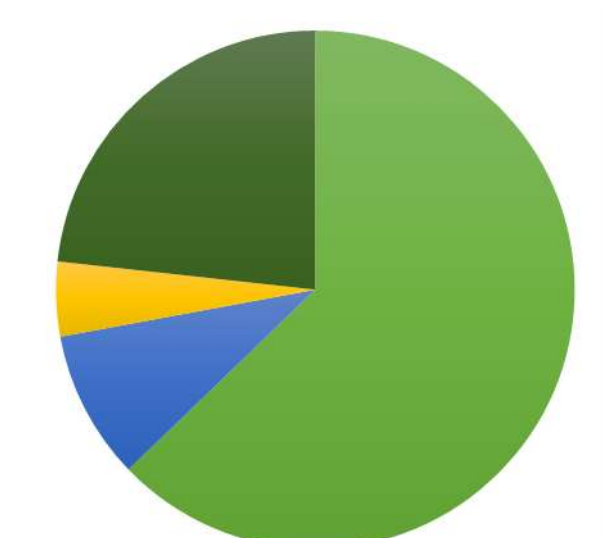
Where did you hear or learn about vaccines?



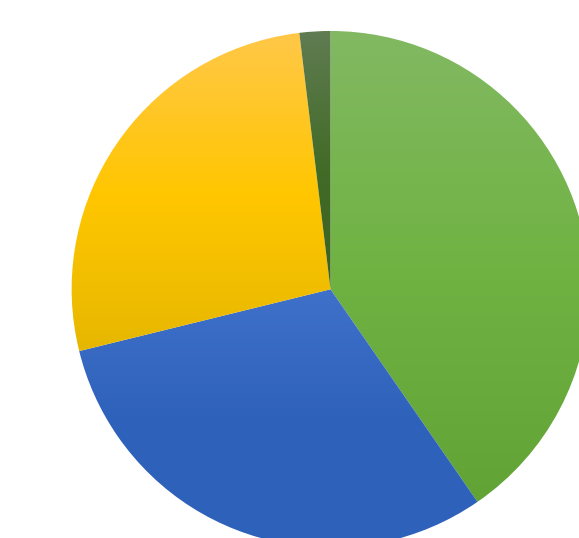
What is something you wish you knew more about with regards to vaccines?



What do you wish your physicians understood about your reasons to vaccinate or not vaccinate yourself and/or your child?



What is your biggest concern about vaccines (if any)?



CONCLUSIONS

1. Short survey tools can help physicians ask specific questions to best help their patients.
2. Responders trust their physicians to help them make decisions and advocate for their best interest based on AAP guidelines and recommendations (Part 1, statements 8 and 9).
3. Responders demonstrated overall confidence in their knowledge about vaccines to make decisions for their family (Part 1, statement 1). Physicians are the primary source of information or responsible for imparting this knowledge to the responders (Part 2, question 2).
4. Responders were concerned with the impact of vaccines on child's growth and development and possible cause of disabilities, and safety (Part 1, question 7; Part 2, questions 2 and 4).
5. Physicians can address the following specific knowledge gaps about vaccines parents/guardians patients.
 - Vaccines prevent life-threatening diseases (Part 1, statements 3)
 - Purpose of vaccination despite never getting sick. (Part 1, statement 4)
 - Multiple testing phases and quality control in vaccine production ensure high safety (Part 1, statements 4 and 5; Part 2, question 4)
 - Extremely low impact of vaccines on pediatric growth and development (Part 1, statement 6; Part 2, question 2)
 - Individual and community short- and long-term benefits of vaccinations. (Part 2, question 2)
 - Possible signs and symptoms and/or the low probability for emergent medical attention and/or hospitalization after receiving a vaccine. (Part 1, statements 4, 5 and 6)
6. A minority of responders use religious and/or philosophical beliefs to guide their health care decisions (Part 1, statement 10).

FUTURE DIRECTIONS

1. Improve the survey tool to more clearly elicit knowledge gaps and understanding of vaccinations.
2. Help physicians integrate education-communication tool developed by Derek Djavaherian and April Pearson (SELECT MD Class 2016) in 2013 with education assessment tool).
3. Develop and/or distribute educational resources for patients to help address specific knowledge gaps. Resources include pamphlets, elevator statements, informational videos, and list of credible internet resources.

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